

Program Name	EPAct 2005, 2606 Wind/Hydro Feasibility Study
Date and Time of Meeting:	November 19, 2008 12:30 – 3:30 MST
Place:	Conference Call
Subject of Meeting:	WHFS Draft Report Review
Meeting Leader:	Mike Radecki
Reporting (Minutes):	Mike Radecki



## Agenda– November 19, 2008

To access the conference call dial **877-643-6951** then enter the pass code **87705226#**

**Wind/Hydro Feasibility Website:** <http://www.wapa.gov/ugp/powermarketing/default.htm>

### Agendas

No.	Item Description	Lead	Time
1.	<b>Introductions / Attendance</b> __ Margaret Bad Warrior, __ Lynn Coles <u>x</u> Mike Costanti, __ Scott Eichelberger, <u>x</u> Jody Farhat, __ Scott Doig, __ Roger Freeman <u>x</u> Bob Gough, <u>x</u> Jim Haigh, __ Doug Hellekson, <u>x</u> Braden Houston, <u>x</u> Rick Hunt, __ Joel Lanketus, __ Darin Larson, __ Henry Louie, <u>x</u> Warren Mackey, <u>x</u> Kim Massey, <u>x</u> Roy McAllister, <u>x</u> Trevor McDonald, __ Mike McDowell, __ Mark Messerli, <u>x</u> Shawn Micken, __ Brian Parsons, __ Cameron Potter, <u>x</u> Mike Radecki, __ Dave Rich, <u>x</u> John Richards, <u>x</u> Bob Rusch, __ Paulette Schaeffer, <u>x</u> Matt Schuerger, __ Bill Schumacher, <u>x</u> Vic Simmons, <u>x</u> Pat Spears, <u>x</u> Tom Weaver, <u>x</u> Ed Weber, __ Walter White Tail Feather, <u>x</u> Tom Wind, __ Karl Wunderlich, __ Bob Zavadill, <u>x</u> Mike Malone	Mike	
2.	<b>Schedule Review / Update</b>	Mike	10 Min
3.	<b>Overview of the Draft WHFS Report</b>	Mike	45 min
4.	<b>Comments / discussion</b> •	Kim	90 min
5.	<b>Wrap-up</b> • Discussion review • Action items • Next meeting / conference call		

### 1. Major Discussions

No.	Discussion
1.	<p>Mike Radecki opened the discussion by reminding the group that this was a fatal flaw review. He then explained that the report would probably go out for public comment with a preliminary recommendation and a request for specific comments on the preliminary recommendation. He also reminded the project team that everyone still had the full 60 day comment period to review and comment on the report.</p> <p>The schedule for the public comment meeting is tentatively set for January 13 in Rapid City. The FRN should be published the first part of December.</p>
2.	The discussion did not include the sections of the report that had already been reviewed by the team—Section 2, Work Elements 2, 3 and 5.
3.	<p>Section 2, Work Element 4, Transmission Analysis:</p> <ul style="list-style-type: none"> <li>• Specific locations of proposed wind that are in queue—only included OASIS information</li> </ul>

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- Costs for interconnection \$8.4 million—represented a reasonable cost
- 773 MW is the amount of wind that would be in Western’s Balancing Area in 2011

Summary of conclusions—tribal wind in studied amounts did not require grid additions since the constraint issues were resolved with the other wind additions prior to the 50 MW of tribal wind

**4.** Section 2, Work Element 5, Assessment of Impacts:

Q: What was included in the 270 MW proposed wind? Basin and Heartland already have 370 MW of proposed wind for the Balancing Area.

A: Wind projects included in proposed amount were projects that were mature and listed in the OASIS. The system costs associated with the additional wind may vary slightly with the additional projects; but these additions should not impact the addition of the 50 MW of tribal wind.

Q: How were the generation profiles for PROMOD created?

A: The information received from the Corps and Bureau were daily. Rick converted these to hourly patterns using Western’s historical generation data; he created general rules for dispatch and did not use load flattening, peak shaving.

Suggestion: Change order of hydro scenarios to Low, Base High throughout the report

Q: Since the design was comparative in nature, the economic saturation could vary with assumptions.

A: Reword to clarify that further work would need to be done to determine a saturation point and the assumptions that most significantly influence that point.

Suggestion: Table 2-15, 16, 17 are confusing; the table will be presented with column markers and formulas to show how the tables relate.

Q: What about double counting of costs for reserves since the costs are non-linear and the 50 MW of tribal wind is added last?

A: Costs for reserves were not called out by design for the analysis; by using the difference between cases, any costs not associated with the TribalWind case should cancel.

Q: Where did the 300 MW of non-tribal wind come from? Has Western already answered the question posed for the study?

A: Responses came back to an RFP issued in 2007; the 300 MW is a piece being considered for 5 years.

Q: Were the quantitative MISO/SPP analysis results included in this study?

A: No, the MISO/SPP study is still under review, a statement to this effect will be included in the executive summary

Q: Can we say that joining MISO/SPP will save dollars?

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	<p>A: No, cannot definitely state that joining ISO will save dollars. Preliminary results show different savings between the ISO's in different hydro conditions</p> <p>Note: Sub-hourly and reserve analysis was well done in the report.</p> <p>Q: How were PTCs handled in the analysis?</p> <p>A: They were included in the cost of energy calculation, assuming a third party equity partner would be able to take advantage of the credits.</p> <p>Q: How was the wind priced in the model?</p> <p>A: All wind added to the system was priced at the same value.</p>
5.	<p>Section 3:</p> <p>Comment: The analysis did not capture the blending of wind and hydro.</p> <p>Reply: Add a comment in the report that this was a qualitative assessment, not quantitative.</p> <p>Q: Was the water savings that would occur due to less thermal generation on the system taken into account?</p> <p>A: Most of the water used for cooling thermal plants is returned to the system, so the net withdrawal should be low. Jody Farhat will try to get the amount of water used for cooling in thermal generation to the team.</p>
6.	<p>Section 4:</p> <p>Suggestion: Include a list of tribes that are Western customers.</p>
7.	<p>Section 5 - Verbal preliminary recommendation</p> <p>Suggestion: Add authorized and appropriated to wording to encompass Federal funding to support the project.</p> <p>Q: Was double RPS credit for energy generated on Federal lands included in the analysis?</p> <p>A: No, but will add a statement referring to this potential benefit.</p> <p>Q: Why is the demonstration project limited to one site? What about benefits of geographic diversity from multiple sites?</p> <p>A: The economic benefit for one 50 MW site was the major consideration. The cost of multiple interconnections increases the capital costs of development. This can be left open for comment in the preliminary recommendations.</p>

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